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10/824,483	04/15/2004	Ji Eun Kim	123056-05004468	6512

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EXAMINER	
QIAN, SONGWEI	
ART UNIT	**PAPER NUMBER**
2109	
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06/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/824,483	KIM ET AL.	
	Examiner	Art Unit	
	Songwei Qian	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/15/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The examiner acknowledges that the application claims foreign priority based on application # 10-2003-0095258 filed on 12/23/2003.

2. Claims 1-11 are pending in this application.

Information Disclosure Statement

3. The information disclosure statement filed on April 15, 2004 has been considered. However, for foreign patent documents "AC and AD", only "Abstract" in English is considered.

Claim Objections

4. The following claims are objected to for lack of antecedent basis:

a.) "the one tag", claim 2, line 4;

b.) "the steps (d)", claims 3-4, line 1;

c.) "the VoiceXML", claims 3-4, lines 2-3;

d.) "conversion", claims 3-4, line 2.

5. The following claims are objected to because of the following informalities:

a.) "an upper tag to a lower tag", claim 1, lines 5-6, claims10-11, lines 2-3;

b.) "belong to the one tag", claim 2, lines 3-4;

c.) "belongs to tags", claim 2, lines 5 and 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. As for claims 3-4, the phrase "an event/handler is defined after conversion, or the VoiceXML is corrected or deleted" is not clearly understood and renders the claims indefinite because it is unclear which step the method should perform under what conditions, the step "an event/handler is defined after conversion" or the step "the VoiceXML is corrected or deleted".

9. As for claims 3-4, the phrase "the VoiceXML is corrected" is not clearly understood and renders the claims indefinite because it is unclear as to how and why

the step "the VoiceXML is corrected", which is also not clearly specified in specification, is performed.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. (US Pub. # 2003/0182366 A1), hereinafter "Baker" in view of Sharma et al. (US Pub. # 2006/0168095 A1), hereinafter "Sharma".

12. As for claim 1, Baker taught how to "convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree" in concept:

A method for converting a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language tree (An alternative method, [0064], lines 1 and 7-8), the method comprising the steps of:

(a) scanning the VoiceXML tree from an upper tag to a lower tag with

initializing the tree (convert VXML to WML, [0064], lines 7-8; note that in order to convert VXML, all tags in VXML need to be scanned, and VXML is VoiceXML);

(b) checking a tag (convert VXML to WML, [0064], lines 7-8; note that in order to convert VXML, all tags in VXML need to be checked);

(c) if the tag is < menu>, converting the tag into a tag < menu> of the XHTML (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]);

(d) if the tag is <grammar>, converting the tag into a tag <input type = radio> of the XHTML (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]); and

(e) if the tag is <form>, adding the tag <form> of XHTML to the XHTML tree and processing the tag <form> (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]; note that the tag <form> in VXML is mapped to the tag <card>).

But Baker does not explicitly teach "(XHTML)+Voice". However, Sharma teaches "(XHTML)+Voice" (multi-modal xHTML, [0130], line 13) and the following ([0130], lines 11-13, TABLE 1, and [0116], line 5):

(The content specified by the URL link in the <switch> tag is then converted into multi-modal WML/xHTML and is then pushed to the WAP browser 902a)

Note that the content here can be VoiceXML.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teachings of Baker with the teachings of Sharma to incorporate "(XHTML)+Voice" to convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree in order to enable bimodal feature access where textual information is displayed simultaneously with matching voice information (Baker, [0005], lines 1-3).

13. As for claim 5, Baker discloses in concept:

A multimodal service method using a system that comprises a user terminal equipped with a general XHTML+Voice browser, a proxy server and a web server providing a VoiceXML document, and converts a VoiceXML document into an XHTML+Voice document (Abstract, line 1), the method comprising the steps of:

executing the XHTML+Voice browser (Voice Browser 120 and Textual Browsers 130, Figure 1, [0019], line 1, and [0020], line 1) and requesting the web server to provide the VoiceXML document by submitting HTTP request, at the user terminal (When either the Voice Browser 120 or the Textual Browser 130 makes an HTTP (Hyper Text Transfer Protocol) request to the web server for this XML page, [0037], lines 2-6 and Figure 1);

transmitting the VoiceXML document to the proxy server from the web server (When either the Voice Browser 120 or the Textual Browser 130 makes an HTTP (Hyper Text Transfer Protocol) request to the web server for this XML page, [0037],

lines 2-6 and Figure 1);

creating a VoiceXML tree from the received VoiceXML document at a VoiceXML parser installed in the proxy server, and transmitting the VoiceXML tree from the VoiceXML parser to a VoiceXML-to-XHTML+Voice converter (inherent in "convert VXML to WML on the fly", [0064], lines 7-8; note that XVML is an XML-based document and any XML-based document is a tree-structured document);

converting the received VoiceXML tree into a new XHTML+Voice tree by means of a predetermined algorithm (one stylesheet, [0064], line 7) at the VoiceXML-to-XHTML+Voice converter, and transmitting the converted XHTML+Voice tree from the VoiceXML-to-XHTML+Voice converter to an XHTML+Voice document generator (convert VXML to WML, [0064], lines 7-8, [0038], [0039], and [0040]);

receiving the XHTML+Voice tree and generating an XHTML+Voice document at an XHTML+Voice document generator to transmit the generated XHTML+Voice document from the XHTML+Voice document generator to the XHTML+Voice browser (convert VXML to WML, [0064], lines 7-8 and [0037], lines 2-12); and

interpreting and executing the XHTML+Voice document at the user XHTML+Voice browser to output speech and graphic ([0037], lines 6-12).

But Baker does not explicitly teach "(XHTML)+Voice". However, Sharma teaches "(XHTML)+Voice" (multi-modal xHTML, [0130], line 13) and the following ([0130], lines 11-13, TABLE 1, and [0116], line 5):

(The content specified by the URL link in the <switch> tag is then converted into

multi-modal WML/xHTML and is then pushed to the WAP browser 902a) Note that the content here can be VoiceXML.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teachings of Baker with the teachings of Sharma to incorporate "(XHTML)+Voice" to convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree in order to enable bimodal feature access where textual information is displayed simultaneously with matching voice information (Baker, [0005], lines 1-3).

14. As for claim 6, Baker discloses in concept:

A multimodal service method using a system that comprises a user terminal equipped with an XHTML+Voice browser having a VoiceXML-to-XHTML+Voice converter, and a web server providing a VoiceXML document, and converts a VoiceXML document into an XHTML+Voice document (Abstract, line 1), the method comprising the steps of:

executing the XHTML+Voice browser (Voice Browser 120 and Textual Browsers 130, Figure 1, [0019], line 1, and [0020], line 1) and requesting the web server to provide the VoiceXML document by submitting HTTP request, at the user terminal (When either the Voice Browser 120 or the Textual Browser 130 makes an HTTP (Hyper Text Transfer Protocol) request to the web server for this XML page, [0037],

lines 2-6 and Figure 1);

transmitting the corresponding VoiceXML document to the XHTML+Voice browser from the web server (When either the Voice Browser 120 or the Textual Browser 130 makes an HTTP (Hyper Text Transfer Protocol) request to the web server for this XML page, [0037], lines 2-6 and Figure 1);

creating a VoiceXML tree from the received VoiceXML document at a VoiceXML parser of the XHTML+Voice browser, and transmitting the created VoiceXML tree from the VoiceXML parser to a VoiceXML-to-XHTML+Voice converter (inherent in "convert VXML to WML", [0064], lines 7-8; note that XVML is an XML-based document and any XML-based document is a tree-structured document);

converting the received VoiceXML tree into a new XHTML+Voice tree by means of a predetermined algorithm (one stylesheet, [0064], line 7) at the VoiceXML-to-XHTML+Voice converter (convert VXML to WML, [0064], lines 7-8); and

interpreting and executing the XHTML+Voice document at an XHTML+Voice renderer to output speech and graphic ([0037], lines 6-12).

But Baker does not explicitly teach "(XHTML)+Voice". However, Sharma teaches "(XHTML)+Voice" (multi-modal xHTML, [0130], line 13) and the following ([0130], lines 11-13, TABLE 1, and [0116], line 5):

(The content specified by the URL link in the <switch> tag is then converted into multi-modal WML/xHTML and is then pushed to the WAP browser 902a)

Note that the content here can be VoiceXML.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teachings of Baker with the teachings of Sharma to incorporate "(XHTML)+Voice" to convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree in order to enable bimodal feature access where textual information is displayed simultaneously with matching voice information (Baker, [0005], lines 1-3).

15. As for claim 7, Baker discloses in concept:

A multimodal service system (A coordinated browsing system, Abstract, line 1) that comprises a user terminal equipped with an XHTML+Voice browser (Voice Browser 120 and Textual Browsers 130, Figure 1, [0019], line 1, and [0020], line 1), a proxy server and a web server providing a VoiceXML document, the proxy server being equipped with a transcoder (a web server of the Server-Side Application 110, [0037], lines 1-2), wherein the transcoder comprises:

a VoiceXML parser for generating a VoiceXML tree (inherent in "convert VXML to WML", [0064], lines 7-8; note that XVML is an XML-based document and any XML-based document is a tree-structured document);

a VoiceXML-to-XHTML+Voice converter for implementing a predetermined conversion algorithm (one stylesheet to convert VXML to WML, [0064], lines 7-8, [0038], [0039], and [0040]; note that one stylesheet is a predetermined conversion

algorithm); and

an XHTML+Voice document generator for converting an XHTML+Voice tree into an XHTML+Voice document (convert VXML to WML, [0064], lines 7-8, [0038], [0039], and [0040]).

But Baker does not explicitly teach "(XHTML)+Voice". However, Sharma teaches "(XHTML)+Voice" (multi-modal xHTML, [0130], line 13) and the following ([0130], lines 11-13, TABLE 1, and [0116], line 5):

(The content specified by the URL link in the <switch> tag is then converted into multi-modal WML/xHTML and is then pushed to the WAP browser 902a)

Note that the content here can be VoiceXML.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teachings of Baker with the teachings of Sharma to incorporate "(XHTML)+Voice" to convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree in order to enable bimodal feature access where textual information is displayed simultaneously with matching voice information (Baker, [0005], lines 1-3).

16. As for claim 8, Baker discloses in concept:

A multimodal service system (A coordinated browsing system, Abstract, line 1) that comprises a user terminal equipped with an XHTML+Voice browser (Voice Browser 120 and Textual Browsers 130, Figure 1, [0019], line 1, and [0020], line 1), and a web server providing a VoiceXML document (a web server of the Server-Side Application 110, [0037], lines 1-2), wherein the XHTML+Voice browser comprises:

a VoiceXML parser for generating a VoiceXML tree from a VoiceXML document (inherent in "convert VXML to WML", [0064], lines 7-8; note that XVML is an XML-based document and any XML-based document is a tree-structured document);

a VoiceXML-to-XHTML+Voice converter for generating XHTML+Voice tree from the VoiceXML tree according to a predetermined conversion algorithm (one stylesheet to convert VXML to WML, [0064], lines 7-8, [0038], [0039], and [0040]; note that one stylesheet is a predetermined conversion algorithm); and

an XHTML+Voice renderer for executing the XHTML+Voice tree ([0037], lines 6-12).

But Baker does not explicitly teach "(XHTML)+Voice". However, Sharma teaches "(XHTML)+Voice" (multi-modal xHTML, [0130], line 13) and the following ([0130], lines 11-13, TABLE 1, and [0116], line 5):

(The content specified by the URL link in the <switch> tag is then converted into multi-modal WML/xHTML and is then pushed to the WAP browser 902a)

Note that the content here can be VoiceXML.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teachings of Baker with the teachings of Sharma to incorporate "(XHTML)+Voice" to convert a Voice eXtensible Markup (VoiceXML) tree generated after parsing a VoiceXML document into an eXtensible HyperText Markup Language (XHTML)+Voice tree in order to enable bimodal feature access where textual information is displayed simultaneously with matching voice information (Baker, [0005], lines 1-3).

17. As for claim 2, the claim is rejected for the same reasons for claim 1 as above. In addition, Baker disclosed in concept:

the step (d) comprises the steps of:

(d-1) converting tags <block> and <prompt> that belong to the one tag <form> into a tag <p> of the XHTML (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]; Baker specifically suggested "a VXML page" as detailed);

(d-2) converting a tag <prompt> which belongs to tags <form> and <field> into a tag <label> of the XHTML (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]; Baker specifically suggested "a VXML page" as detailed); and

(d-3) converting a tag <submit> which belongs to tags <form> and <field> or a tag <block> into a tag <input type = submit> of the XHTML (one stylesheet to convert

VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]; Baker specifically suggested "a VXML page" as detailed).

18. As for claims 3-4, the claims are rejected for the same reasons for claim 1 as above. In addition, Baker disclosed in concept:

in each of the steps (d), an event/handler is defined after conversion, or the VoiceXML is corrected or deleted (Figure 2 and [0037], lines 2-15; note that 210, 232, and 250 are examples of some events, and VXML is created based on an HTTP request).

19. As for claim 9, the claim is rejected for the same reasons for claim 8 as above. In addition, Baker disclosed in concept:

a speech service provided through the XHTML+Voice browser is browsed as a multimodal service (Abstract, lines 1-3); and

in the speech service, one of a speech input/output use mode and a speech input/output cancel mode can be selected (Voice Selection 234, Figure 2 and [0028], lines 8-11).

20. As for claims I0-11, the claims are rejected for the same reasons for claims 1 and 8 as above. In addition, Baker disclosed in concept:

the VoiceXML-to-XHTML+Voice converter scans the VoiceXML tree from an upper tag to a lower tag with checking a tag (convert VXML to WML, [0064], lines 7-8;

note that in order to convert VXML, all tags in VXML need to be scanned, and all tags in VXML need to be checked), if the tag is <menu>, converts the tag <menu> into a tag <a> of the XHTML, if the tag is <grammar>, converts the tag <grammar> into a tag <input type = radio> of the XHTML, and if the tag is <form>, adds the tag <form> of XHTML to the XHTML tree and processes the tag <form> (one stylesheet to convert VXML to WML on the fly, [0064], lines 7-8, [0038], [0039], and [0040]; Baker specifically suggested "a VXML page" as detailed).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Songwei Qian whose telephone number is 571-270-1910. The examiner can normally be reached on M-F (alternative Friday off 8:00am thru 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on 571-272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SQ
06/13/2007

N. El Hady

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